

Abstract

Conventionally, when a canned motor is used in the drive part of a rotary dry vacuum pump, there is found a problem that reaction produced gas flows into the interior of the canned motor to thereby break down the canned motor and thus the rotary dry vacuum pump. To solve this problem, according to the invention, there is provided a rotary dry vacuum pump comprising a rotary rotor composed of one or plural rotors housed within a housing, bearings for supporting respectively the rotary shafts of these rotors, a suction port and an exhaust port formed in the housing respectively for sucking and exhausting fluid, and a rotary rotor composed of a motor for driving and rotating at least one of the rotors, wherein the motor includes a stator core fixed to the inside of the housing of the motor, a partition wall mounted on the rotor inner peripheral side is fixedly secured to the housing to thereby hermetically seal the interior of the partition wall, a rotary element is rotatably disposed on the shaft within the partition wall to thereby provide a rotatable structure, and there is opened up in the motor a gas charge hole for charging purge gas into the partition wall.